

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,026,484 B2
APPLICATION NO. : 10/080926
DATED : April 11, 2006
INVENTOR(S) : Lin Zhi et al.

Page 1 of 8

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 82, Line 13 should read

- (±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2-methylpropyl)-4-trifluoromethylcyclopentano
[g]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2,2,2-chlorodifluoro-ethyl)-4-
trifluoromethylcyclopentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-cyclopropylmethyl-4-
trifluoromethylcyclopentano[g]-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-4c,5,6,7,7a(*cis*),8-Hexahydro-8-(2,2-dimethoxyethyl)-4-trifluoromethylcyclo-
pentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-4c,5,6,7,8,8a(*cis*)-Hexahydro-9-(2,2,2-trifluoroethyl)-4-trifluoromethyl-9*H*-
cyclohexano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-4c,5,6,7,8,9,9a(*cis*),10-Octahydro-10-(2,2,2-trifluoroethyl)-4-
trifluoromethylcycloheptano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-5,6-*cis*-Dihydro-6-ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-5,6-*cis*-Dihydro-5-butyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-
pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-5,6-*cis*-Dihydro-5-(4-nitrophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-
trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-5,6-*cis*-Dihydro-5-(4-dimethylaminophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-
trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-5,6-*cis*-Dihydro-5-(4-methoxyphenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-
trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-5,6-*cis*-Dihydro-5-(3-trifluoromethylphenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-
trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-5,6-*cis*-Dihydro-5-(4-fluorophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-
trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-5,6-Dihydro-5-phenyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7*H*-pyrrolo-3,2-*f*-
quinolin-2(1*H*)-one;
(±)-5,6-*cis*-Dihydro-5-(4-methoxyphenyl)-6-methyl-4-trifluoromethyl-7*H*-pyrrolo
[3,2-*f*]quinolin-2(1*H*)-one;
(±)-5,6-*cis*-Dihydro-5-(4-methoxyphenyl)-6-methyl-7-(2,2-dimethoxyethyl)-4-
trifluoromethyl-7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
(±)-5,6-*cis*-Dihydro-5-isopropyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-
7*H*-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;

PLEASE
REKEY
THE CORRECTION
TO CLAIM 34
Equations/Formulas
and
Text

[see new pages
5,6,7]

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- (±)-5,6-Dihydro-5-ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo-[3,2-f]quinolin-2(1H)-one;
(±)-5,6-Dihydro-5-ethyl-6-propyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo-[3,2-f]quinolin-2(1H)-one;
(±)-5,6-Dihydro-5-(2-ethoxycarbonyl-ethyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5,6-Dimethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
6-Methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
6-Ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5-Ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5-Ethyl-6-propyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5,6,7,8-Tetrahydro-8-(2,2,2-trifluoroethyl)-4-trifluoromethylcyclopentano[g]-pyrrolo[3,2-f]quinolin-2(1H)-one;
8-Trifluoroethyl-4-trifluoromethyl-6,8-dihydrocyclopentano[g]pyrrolo[3,2-f]quinolin-2(1H)-one;
9-Trifluoroethyl-trifluoromethyl-9H-benzo[g]pyrrolo[3,2-f]quinolin-2(1H)-one;
5-(3-Trifluoromethylphenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5-(4-Fluorophenyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5-(2-Ethoxycarbonyl-ethyl)-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5-Hydroxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5-Methyl-6-(1-hydroxyethyl)-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5-Methyl-6-acetyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5-Formyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5-Acetyloxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
2-Acetyloxy-5-hydroxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo(3,2-f]quinoline;

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6-Ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-2(1H)-one;
5-Ethoxymethyl-6-ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]-
quinolin-2(1H)-one;
(+)-6-(1-Methoxyethyl)-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo
[3,2-f]quinolin-2(1H)-one;
7-Allyl-6-methyl-4-trifluoromethyl-5H-pyrrolo[2,3-f]quinolin-2(1H)-one;
6-Ethyl-7-methyl-4-trifluoromethyl-5H-pyrrolo[2,3-f]quinolin-2(1H)-one;
7-(3-Trifluoromethylphenyl)-6-methyl-4-trifluoromethyl-5H-pyrrolo[2,3-f]quinolin-2
(1H)-one;
7-(2-Hydroxyethyl)-6-methyl-4-trifluoromethyl-5H-pyrrolo[2,3-f]quinolin-2(1H)-one;
(+)-4c,5,6,7,7a(cis),8-Hexahydro-8-(2,2,2-trifluoroethyl)-4-trifluoromethyl-
cyclopentano-[g]-pyrrolo[3,2-f]quinolin-2(1H)-one;
(-)-4c,5,6,7,7a(cis),8-Hexahydro-8-(2,2,2-trifluoroethyl)-4-
trifluoromethylcyclopentano-[g]-pyrrolo[3,2-f]quinolin-2(1H)-one;
(±)-5,6-Dihydro-6-hydroxymethyl-4-trifluoromethylpyrrolo[3,2-f]quinolin-2(1H)-one;
(±)-5,6-Dihydro-7-ethyl-6-hydroxymethyl-4-trifluoromethylpyrrolo[3,2-f]quinolin-2
(1H)-one;
5-Methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethylpyrrolo[3,2-f]quinolin-2(1H)-one;
6-Formyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]
quinolin-2(1H)-one; and
5,6-Dimethyl-7-(2,2-difluorovinyl)-4-trifluoromethyl-7H-pyrrolo[3,2-f]quinolin-
2(1H)-one.

Col. 84, line 1 should read .

33. A compound according to claim 1, wherein said compound is selected from the group consisting of:

(±)-4c,5,6,7,7a(cis),8-Hexahydro-8-(2,2,2-trifluoroethyl)-4-
trifluoromethylcyclopentano-[g]-pyrrolo-[3,2-f]quinolin-2(1H)-one;
(±)-4c,5,6,7,7a(cis),8-Hexahydro-8-ethyl-4-trifluoromethylcyclopentano-[g]pyrrolo
[3,2-f]quinolin-2(1H)-one;
(±)-5,6-Dihydro-5,6-cis-dimethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo
[3,2-f]quinolin-2(1H)-one;
(±)-4c,5,6,7,7a(cis),8-Hexahydro-8-propyl-4-trifluoromethylcyclopentano-[g]pyrrolo-
[3,2-f]quinolin-2(1H)-one;
(±)-4c,5,6,7,7a(cis),8-Hexahydro-8-(2,2,2-chlorodifluoroethyl)-4-trifluoromethylcyclo-
pentano-[g]-pyrrolo[3,2-f]quinolin-2(1H)-one;
(±)-4c,5,6,7,7a(cis),8-Hexahydro-8 cyclopropylmethyl-4-trifluoromethylcyclopentano
[g]pyrrolo[3,2-f]quinolin-2(1H)-one;

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Note
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- Note*
- (±)4c,5,6,7,8,8a(*cis*)-Hexahydro-9-(2,2,2-trifluoroethyl)-4-trifluoromethyl-9H-cyclohexano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one; *h*
 - (±)-5,6-*cis* -Dihydro-6-ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - (±)-5,6-*cis*-Dihydro-5-butyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - (±)-5,6-Dihydro-5-ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - (±)-5,6-Dihydro-5-ethyl-6-propyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - (±)-5,6-*cis*-Dihydro-5-methyl-6-ethyl-7-(2,2,2-trifluoroethyl)-7H-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - 5,6-Dimethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - 6-Methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - 6-Ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - 5-Ethyl-6-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - 5,6,7,8-Tetrahydro-8-trifluoroethyl-4-trifluoromethylcyclopentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - 6-Ethyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-7H-pyrrolo[3,2-*f*]quinolin-2(1*H*)-one;
 - (+)-4c,5,6,7,7a(*cis*)-8-Hexahydro-8-(2,2,2-trifluoroethyl)-4-trifluoromethylcyclopentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one; and *-4-*
 - (-)-4c,5,6,7,7a(*cis*)-8-Hexahydro-8-(2,2,2-trifluoroethyl)-4-trifluoromethylcyclopentano[g]pyrrolo[3,2-*f*]quinolin-2(1*H*)-one; *pentano*
- Note*

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PATENT NO. : 7,026,484B2

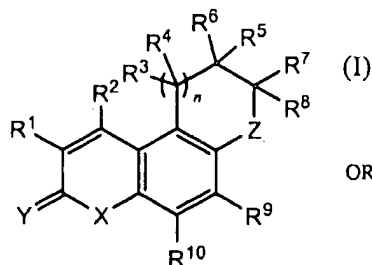
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DATED : APRIL 11, 2006

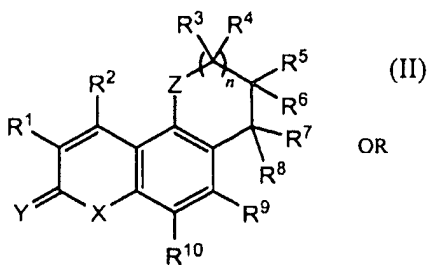
INVENTOR(S) : LIN ZHI ET AL.

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

NOK
Column 44, line 64 should read34. A pharmaceutical composition, comprising:
a pharmaceutically acceptable carrier; and
a compound of formula:

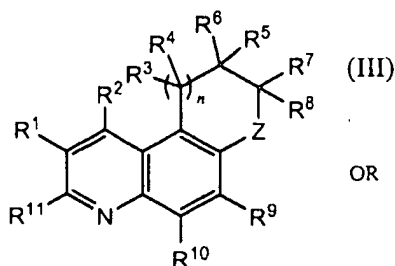
(I)

OR



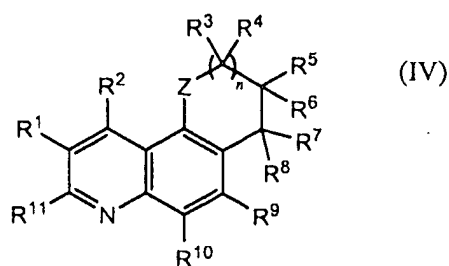
(II)

OR



(III)

OR



(IV)

MAILING ADDRESS OF SENDER:

PATENT NO. 7,026,484

Stephanie Seidman
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PATENT NO. : 7,026,484B2

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INVENTOR(S) : LIN ZHI ET AL.

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

wherein:

R¹ is selected from among hydrogen, F, Cl, Br, I, NO₂, OR¹², SR¹², SOR¹², SO₂R¹², NR¹²R¹³, C₁-C₈ alkyl, C₁-C₈ haloalkyl and C₁-C₈ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R² is selected from among F, Cl, Br, I, CF₃, CHF₂, CH₂F, CF₂Cl, CN, CF₂OR¹², CH₂OR¹², OR¹², SR¹², SOR¹², SO₂R¹², NR¹²R¹³, substituted C₁-C₈ alkyl, C₁-C₈ haloalkyl, C₁-C₈ heteroalkyl, C₂-C₈ alkenyl and C₂-C₈ alkynyl, wherein the haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted;

R³ is selected from among hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R⁴ is selected from among hydrogen, F, Cl, Br, I, OR¹², NR¹²R¹³, SR¹², SOR¹², SO₂R¹², C₁-C₈ alkyl, C₁-C₈ haloalkyl, C₁-C₈ heteroalkyl, C₂-C₈ alkynyl, C₂-C₈ alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

R⁵ is selected from among hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R⁶ is selected from among hydrogen, F, Cl, Br, I, OR¹², NR¹²R¹³, SR¹², SOR¹², SO₂R¹², C₁-C₈ alkyl, C₁-C₈ haloalkyl, C₁-C₈ heteroalkyl, C₂-C₈ alkynyl, C₂-C₈ alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted;

R⁷ is selected from among hydrogen, C₁-C₆ alkyl, C₁-C₆ haloalkyl and C₁-C₆ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

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It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

R^8 is selected from among hydrogen, F, Cl, Br, I, OR¹², NR¹²R¹³, SR¹², SOR¹², SO₂R¹², C₁-C₈ alkyl, C₁-C₈ haloalkyl, C₁-C₈ heteroalkyl, C₂-C₈ alkynyl, C₂-C₈ alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted; or

R^3 and R^5 taken together form a bond; or

R^5 and R^7 taken together form a bond; or

R^4 and R^6 taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted; or

R^6 and R^8 taken together form a three- to eight-membered saturated or unsaturated carbocyclic ring, wherein the carbocyclic ring is optionally substituted;

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R^9 and R^{10} each independently is selected from among hydrogen, F, Cl, Br, I, CN, OR^{12} , $NR^{12}R^{13}$, $C_m(R^{12})_{2m}OR^{13}$, SR^{12} , SOR^{12} , SO_2R^{12} , $NR^{12}C(O)R^{13}$, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;

R^{11} is selected from among F, Br, Cl, I, CN, OR^{14} , $NR^{14}R^{13}$ and SR^{14} ;

R^{12} and R^{13} each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, C_2-C_8 alkenyl, C_2-C_8 alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;

R^{14} is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl, C_1-C_8 heteroalkyl, aryl, heteroaryl, $C(O)R^{15}$, CO_2R^{15} and $C(O)NR^{15}R^{16}$, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

R^{15} and R^{16} each independently is selected from among hydrogen, C_1-C_8 alkyl, C_1-C_8 haloalkyl and C_1-C_8 heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S;

X is N $\{R^{14}\}$;

Y is selected from among O, S, N $\{R^{12}\}$ and NO $\{R^{12}\}$;

Z is N $\{R^{12}\}$;

n is 0; and

m is 0 or 1;

or a pharmaceutically acceptable salt thereof.

This certificate supersedes certificate of correction
issued August 28, 2007.